

III. _____ = The ACTUAL age of an object _____

A) Absolute Dating _____

1) _____ **Dating**-- a dating method that compares _____ with _____

more parent = _____

more daughter = _____

a) _____ **decay**-- the process in which a radioactive isotope _____ into a _____ isotope

b) _____ -- an atom with the same number of protons as other atoms, but a different number of _____

(1) _____ **isotope** -- the _____ radioactive isotope

(2) _____ **isotope**-- the _____ isotope produced after a radioactive decay

c) _____ = _____ -- the time it takes one half of the _____ material to decay into _____ material

d) types of _____

Parent Isotope	Daughter Isotope	Half-life	Effective range
Carbon-14	Nitrogen-14	5730 years	less than 70,000 years
Uranium-235	Lead-207	704 million	10 mill - 4.6 bill
Uranium-238	Lead-206	4.5 bill	10 mill - 4.6 bill
Potassium-40	Argon-40	1.25 billion	50,000 - 4.6 bill
Thorium-232	Lead-208	14 bill	up to 200 mill
Rubidium-87	Strontium-87	48.8 bill	10 mill - 4.6 bill

